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(54) Method of preparing a SOI substrate by using a bonding process, and SOI substrate produced by the same

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(57) A semiconductor substrate adapted to gigascale integration (GSI) comprises a support, at least the surface of which is made of semiconductor, an electroconductive material layer, an insulating layer and a semiconductor layer arranged sequentially in the above order. The electroconductive material layer has at least in part thereof an electroconductive reacted layer obtained

by causing two metals, a metal and a semiconductor, a metal and a metal-semiconductor compound, a semiconductor and a metal-semiconductor compound, or two metal-semiconductor compounds to react each other. An electroconductive reaction terminating layer that is made of a material that does not react with the reacted layer is arranged between the reacted layer and the insulating layer or the support.

FIG. 11

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EUROPEAN SEARCH REPORT

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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